

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of	)	
	)	
Revision of the Commission's Rules to	)	CC Docket No. 94-102
Ensure Compatibility with Enhanced	)	
911 Emergency Calling Systems	)	
	)	
Wireless E911 Phase II Implementation	)	
Plan of Nextel Partners, Inc.	)	

**NEXTEL PARTNERS, INC.  
PHASE I AND PHASE II E911 QUARTERLY REPORT  
FEBRUARY 1, 2003**

**To: Chief, Enforcement Bureau  
Chief, Wireless Telecommunications Bureau**

**INTRODUCTION**

Pursuant to the October 12, 2001 Order of the Federal Communications Commission ("Commission") in CC Docket No. 94-102,<sup>1</sup> Nextel Partners, Inc. ("Nextel Partners") respectfully submits this Enhanced 911 ("E911") Quarterly Report on its implementation of Phase I and Phase II E911. Nextel Partners achieved its first Phase II benchmark, October 1, 2002, when it began selling and activating an Assisted Global Positioning Satellite ("A-GPS") handset. Since that date Nextel Partners has begun selling a second A-GPS handset model and, in just three months, has launched 6 Phase II areas with live Phase II service that encompass 18 PSAPs. Herein, Nextel Partners provides an update on all relevant events impacting handset upgrades and network infrastructure necessary to enable Phase II E911 location capabilities as well as a listing

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<sup>1</sup> *In the Matter of Revision of the Commission's Rules To Ensure Compatibility With Enhanced 911 Emergency Calling Systems, Wireless E911 Phase II Implementation Plan of Nextel Communications, Inc. and Nextel Partners, Inc.*, Order, CC Docket No. 94-102, FCC 01-295, released October 12, 2001 ("Nextel Waiver Order").

of all pending requests for Phase I and Phase II E911 service and the status of each request.

### **BACKGROUND**

Pursuant to the Nextel Waiver Order, the Commission imposed on Nextel Communications, Inc. and Nextel Partners (jointly referred to herein as “Nextel”) the following Phase II E911 implementation plan:

- October 1, 2002:* Begin selling and activating A-GPS-capable handsets;
- December 31, 2002:* Ensure that at least 10% of all new handsets activated are A-GPS-capable;
- December 1, 2003:* Ensure that at least 50% of all new handsets activated are A-GPS-capable;
- December 1, 2004:* Ensure that 100% of all new digital handsets activated are A-GPS-capable;
- December 31, 2005:* 95% of all subscriber handsets in service are A-GPS-capable.<sup>2</sup>

As Nextel Partners has detailed in its previous Reports,<sup>3</sup> Nextel and Motorola began developing an A-GPS capability for Nextel’s integrated digital enhanced network (“iDEN”) technology in the Fourth Quarter of 2000, prior to the Commission granting Nextel’s waiver request. Since the Fourth Quarter of 2000 Nextel, along with Motorola and other vendors, has devoted substantial resources to develop, test, and install network hardware and software, and to develop, test and launch A-GPS capable iDEN handsets. Launching a complicated technology to first calculate, and then deliver, location

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<sup>2</sup> Nextel Waiver Order at ¶37.

<sup>3</sup> See, e.g., *Nextel Partners, Inc. Phase I and Phase II E911 Quarterly Report*, CC Docket No. 94-102 (Nov. 1, 2002) (“Nextel Partners’ November Report”); *Nextel Partners, Inc. Phase I and Phase II E911 Quarterly Report*, CC Docket 94-102 (Aug. 1, 2002); *Nextel Partners, Inc. Phase I and Phase II E911 Quarterly Report*, CC Docket 94-102 (May 1, 2002).

information from an iDEN handset to a public safety answering point (“PSAP”), particularly in the compressed timeline demanded by the Nextel Waiver Order, has required unprecedented efforts and coordination among numerous entities, and such effort and multi-party coordination continues as Nextel Partners deploys individual PSAPs.

## **DISCUSSION**

### **A. Introduction of the i58sr A-GPS Capable Handset**

Following the launch of its first A-GPS capable handset, the i88s, on October 1, 2002 in compliance with its first Phase II implementation benchmark, Nextel launched its second A-GPS capable handset, the i58sr, on January 1, 2003. Nextel, via an independent third-party consultant, has completed accuracy testing of its A-GPS handsets and has met the Commission’s standards for a handset-based Phase II solution. Per Nextel’s Waiver Order, the next deployment benchmark period on which Nextel Partners must report ends on November 30, 2003. Nextel Partners will report on that benchmark in its February 2004 Quarterly Report.<sup>4</sup>

### **B. Network Infrastructure**

When Nextel Communications filed its November Quarterly Report, it had recently completed validating its Phase II solution in a live network environment, referred to as a First Office Application (“FOA”), in York County, Virginia. As Nextel described in its November Report, although its network was properly generating the latitude and longitude of an A-GPS handset, the information was not transmitting from

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<sup>4</sup> Nextel’s Waiver Order states that “Nextel must report, in the Quarterly Report immediately following the benchmark date...for the periods of December 31, 2002 to November 30, 2003..., the percentage of new handsets activated nationwide during the respective periods that were A-GPS capable, as well as the total number of new handsets during those periods that were A-GPS capable.” Nextel Waiver Order at ¶ 32.

Nextel's Gateway Mobile Location Center ("GMLC") through Intrado's national automatic location identification ("ALI") database, through the local exchange carrier's ("LEC's") ALI database and to the PSAP.<sup>5</sup> Although these issues were resolved and Nextel's Phase II service was launched in York County on October 1, 2002, Nextel learned from this and subsequent deployments that timer, trunking, connectivity or other problems—which frequently are deployment specific and often outside of Nextel's control—create E911 initiation uncertainty since it is impossible to predict the unknown hurdles that may insert added delay into the deployment process.<sup>6</sup>

Nextel Partners continues to commit significant resources and personnel to deploy PSAPs as rapidly as possible and has made noteworthy progress since its November Report. Nonetheless, because of complexities inherent in many deployments and despite rigorous network and component testing by Nextel and Motorola prior to its Phase II launch, Nextel Partners continues to discover end-to-end connectivity issues with some deployments.

For example, in a Phase II deployment the third week of November, Nextel learned that the two types of trunking (Feature Group D—"FGD"—and SS7) used from Nextel's mobile switching center ("MSC") were not universally compatible with the

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<sup>5</sup> See Nextel Partners' November Report.

<sup>6</sup> See *A Report on Technical and Operational Issues Impacting the Provision of Wireless Enhanced 911 Services*, Prepared for the Federal Communications Commission by Dale N. Hatfield, at pp. 23-24 ("the actual implementation of wireless E911 in a geographic area is a very challenging undertaking because of the number of entities involved and the complexity of both their technical and operational interrelationships.") See Public Notice, *Wireless Telecommunications Bureau Seeks Comment on Report on Technical and Operational Wireless E911 Issues*, WT Docket No. 02-46, DA 02-2666, released October 16, 2002. See also, *In the Matter of Revision of the Commission's Rules To Ensure Compatibility With Enhanced 911 Emergency Calling Systems*, Letter from John R. Melcher, Thera Bradshaw and Evelyn Bailey to Marlene H. Dortch, CC Docket No. 94-102, (September 20, 2002) ("It is a feature of the real world, testified to by many early Phase II implementers, that the definition of readiness evolves and varies according to the peculiarities of individual serving arrangements, configurations and geographies. Not until the work starts will all the variables be identified.").

three primary types of LEC selective routers (CML, 5E and DMS). Initially Nextel attempted to connect FGD with DMS and, after repeated transmission failures, learned that FGD is compatible only with CML in Nextel's "emergency services routing key" ("ESRK") Phase II technology. Since the selective router was DMS in this deployment, Nextel had to order and then install SS7 trunks to resolve the problem. This discovery temporarily delayed the deployment while awaiting delivery and installation of the trunks, but the knowledge gained should alleviate similar issues that may occur in future deployments.

Because of these trunking-related issues and other factors, some PSAPs may require a Phase II solution using emergency services routing digits ("ESRD") rather than the ESRK technology currently supported by Nextel.<sup>7</sup> Adjusting Nextel's interconnectivity to support the use of ESRDs will create new integration issues, involving Nextel, the LEC and other third parties, requiring additional time before Nextel can successfully deploy those PSAPs. Nextel, however, currently is analyzing an ESRD solution for its iDEN network and anticipates testing with PSAPs in the near future. Nextel remains in contact and is committed to working with PSAPs from those areas requiring an ESRD solution, and Nextel Partners will begin to deploy them as soon as possible.

Moreover, Nextel Partners continues to work with PSAPs to fine-tune its Phase II service. Nextel's Phase II solution currently delivers the call back number and latitude and longitude of the wireless call's originating cell tower at call setup. After a caller's location information has been calculated using the A-GPS functionality in Nextel's

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network, the wireless caller's location information (expressed in latitude and longitude) is transmitted to the PSAP. After Nextel Partners began discussing deployment with PSAPs, it became clear that while some PSAPs can accept the cell tower latitude and longitude for Phase I information, others require the cell tower's textual street address. Nextel is working with a third party vendor and, barring unforeseen technical complications, anticipates supplementing its Phase II solution with this additional street address alternative information by the end of the first quarter of 2003. Nextel Partners has completed its FOA testing of the product and plans to conduct live PSAP testing in February.

### C. Phase I Requests

With respect to the Commission's requirement that Nextel Partners provide "information on all pending Phase I and Phase II requests,"<sup>8</sup> Nextel Partners has attached Exhibit A, listing the 62 pending Phase I requests and their current status.<sup>9</sup> In addition to the current status is the name of the PSAP, the date of the request, whether or not the request is valid, its status, an explanation of the delay if the request is older than six months,<sup>10</sup> and an anticipated Phase I launch date. The proposed deployment dates in Exhibit A are *target launch dates, which Nextel Partners and the relevant PSAP are striving to meet*. Nextel Partners is in regular contact with each of these PSAPs and is

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<sup>7</sup> Either ESRK or ESRD is a technologically acceptable signaling solution to allow the PSAP to obtain E911 Phase II information from the wireless carrier's network.

<sup>8</sup> See Nextel Waiver Order at ¶32.

<sup>9</sup> In many cases a PSAP area listed in Exhibit A and Exhibit C represents multiple local PSAPs.

<sup>10</sup> In some cases there are delays caused by technology issues. Such delays do not necessarily mean that the PSAP or Nextel Partners is not "ready" for Phase I service. Rather, it often means there are issues involving incompatible technologies between Nextel Partners, the LEC and/or the PSAP.

working to deploy Phase I E911 as soon as possible. Nextel Partners has fully deployed Phase I E911 service with 377 PSAPs, which are listed on Exhibit A.

As noted above, some of the listed Phase I requests in Exhibit A are more than six months old. For each of those requests, Nextel Partners includes an explanation of the delay based on communications with the PSAP, LEC and / or Intrado.

#### D. Phase II Requests

Nextel Partners has received Phase II service requests in 15 PSAP areas and a total of 129 PSAPs. We have communicated with each of these PSAPs and have asked each PSAP to provide the documentation required in the *Richardson Order* for determining the request's validity.<sup>11</sup> Exhibit B addresses Nextel Partners' ongoing Phase II deployment efforts, providing a list of the 129 Phase II request, the name of the PSAP, the date of the request, whether or not the request is valid, its status, an explanation of the delay. Since October 1, 2002, its first implementation benchmark, Nextel Partners has deployed Phase II service in **6** PSAP areas, which are listed in Exhibit B, encompassing **18** PSAPs. Nextel Partners has deployed Phase II service in Peoria County, IL; Vigo County, IN; Cattaraugus County, NY; Erie and York Counties, PA; Franklin, Lamoille, Rutland, Washington, Windsor and Addison Counties, VT; and Albemarle, Bedford, Henry and Pittsylvania Counties, VA. Nextel Partners remains actively engaged with other PSAPs at multiple locations and anticipates deploying Phase II service in additional areas in the near future, consistent with mutually agreeable timeframes.

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<sup>11</sup> *In the Matter of Revision of the Commission's Rules To Ensure Compatibility with Enhanced 911 Emergency Calling Systems, Petition of City of Richardson*, Order On Reconsideration, CC Docket No. 94-102, FCC 01-293, released November 26, 2002.

If the request from the PSAP is “on hold”, a reason has been listed, in addition to an explanation of the delay. Currently there are 82 PSAPs “on-hold” within the Nextel Partners area.

As in Exhibit A, the proposed deployment dates in Exhibit B are *target launch dates, which Nextel Partners and the relevant PSAP are striving to meet*. Nextel Partners reiterates that accomplishing such deployments is subject to numerous factors and parties outside of Nextel Partners’ control. Thus, Nextel Partners’ deployment schedule establishes a goal toward which Nextel Partners will work; it is likely, however, that complexities will be encountered that will delay some PSAP deployments. Nextel Partners is in regular contact with each of these PSAPs and is working to deploy Phase II E911 as soon as possible within mutually agreed upon time frames.

LEC “holds” in some areas prevent Phase II deployments. For example, in territories served by Qwest and SBC, the LEC has advised Nextel Partners that deployments cannot commence until tariffs or contracts with PSAPs have been approved. Nextel Partners is prepared to begin deployments of valid requests in regions served by these LECs as rapidly as possible within mutually agreeable time frames when these issues have been resolved. Nextel Partners’ human capital is a finite resource; therefore, given this constraint and the technical complexities often involved with deployments, if multiple valid requests from these regions would be submitted to Nextel Partners simultaneously, Nextel Partners would work with each PSAP to arrange a mutually agreeable deployment schedule in light of these limitations.



Exhibit B also contains the listing of the 29 pending Phase II requests. As noted with the other Phase II request, the name of the PSAP, the date of the request, whether or not the request is valid, its status, an explanation of the delay are included in the exhibit.

### **CONCLUSION**

As required in the Nextel Waiver Order,<sup>12</sup> Nextel Partners is providing this Quarterly Report to the Executive Directors and counsel of the Association of Public Safety Communications Officials-International, Inc. (“APCO”), the National Emergency Number Association (“NENA”) and the National Association of State Nine One One Administrators (“NASNA”). Should any of these organizations or their individual PSAP members have questions or concerns about Nextel Partners’ submission, Nextel Partners encourages them to contact Pete Gaffney, at the number listed below, as soon as possible to facilitate rapid and efficient deployment of Nextel Partners’ Phase I and Phase II E911 services.

Respectfully submitted,  
Nextel Partners, Inc.

/s/ Dave Aas  
By: \_\_\_\_\_  
Dave Aas  
Vice President

Peter A Gaffney  
E911 Project Manager

Brent G. Eilefson  
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<sup>12</sup> Nextel Waiver Order at ¶32.

Kirkland, WA 98033  
(425) 576-3600

February 1, 2003

AFFIDAVIT

David Aas, duly sworn, deposes and states that:

1. I am the Vice President of Nextel Partners, Inc., with an address of 4500 Carillon Point, Kirkland, WA 98033, and with a telephone number of (425) 576-3600.
2. I hereby represent that the attached data regarding the status of Nextel Partners' E-911 Phase I and Phase II deployments are true and correct to the best of my knowledge, information and belief.

/s/David Aas

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David Aas  
Vice President

In witness whereof I have hereunto subscribed my name and affixed my official seal this 3rd day of February, 2003.

/s/ Denise Swerland

\_\_\_\_\_  
Printed Name: Denise Swerland  
NOTARY PUBLIC in and for the State of Washington  
My Commission Expires: 1/31/05